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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,190	05/23/2006	Ezio Bombardelli	2503-1215	1808
466 7590 05/08/2007 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER MI, QIUWEN	
			ART UNIT 1655	PAPER NUMBER
			MAIL DATE 05/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,190	Applicant(s) BOMBARDELLI, EZIO	
	Examiner Qiuwen Mi	Art Unit 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections –35 USC § 112, 2nd

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, and 15 are confusing because of the “and/or”, as it is not clear whether Applicant requires that all of the components in a, b, and c are in the composition. Because of the “or”, claims are examined under component in a only or components in both b and c.

Claims 1-15 are confusing because of the misspelling. The correct spelling of “floroglucinols” should be “phloroglucinols”, and the correct spelling of “Mirtus” is “Myrtus”. It is not clear what mirtocumolone refers to, and therefore is unsearchable.

Claim Rejections –35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim 1 is rejected under 35 USC § 102 (b) as being anticipated by Imaoka et al (JP 406179609).

Imaoka et al teach a composition with high antibacterial activity on oral bacteria comprising grape extract.

As evidenced by Nieuwenhuizen et al (US 2003/0064937), grape contains procyanidins [p0023, 0077]. Further evidenced by Gros (FR 2571257), grapes contain anthocyanoside (see Abstract).

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., Ex Parte Masham, 2 USPQ2d 1647 (1987) and In Re Hack 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Therefore, the reference is deemed to anticipate the instant claim above.

Claims 1, 2, and 4 are rejected under 35 USC § 102 (b) as being anticipated by Nieuwenhuizen et al (US 2003/0064937).

Nieuwenhuizen et al teach a tablet containing 200 mg *Vitis vinifera* extract (comprising 85 wt.% procyanidins) [p0076, 0077].

As evidenced by Gros (FR 2571257), grapes contain anthocyanoside (see Abstract).

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., Ex Parte

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Masham, 2 USPQ2d 1647 (1987) and In Re Hack 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Therefore, the reference is deemed to anticipate the instant claim above.

Claims 1-3 rejected under 35 USC § 102 (b) as being anticipated by Gorenbein et al (US 5,955,102).

Gorenbein et al teach a nutritional supplement comprising 3-200 mg/day of anthocyanoside from bilberry extract (the same as *Vaccinium myrtillus*, col 3, lines 10-15).

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., Ex Parte Masham, 2 USPQ2d 1647 (1987) and In Re Hack 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Therefore, the reference is deemed to anticipate the instant claim above.

Claims 1-3 rejected under 35 USC § 102 (b) as being anticipated by Gorenbein et al (US 5,955,102).

Gorenbein et al teach a nutritional supplement comprising 3-200 mg/day of anthocyanoside from bilberry extract (the same as *Vaccinium myrtillus*, col 3, lines 10-15).

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., Ex Parte Masham, 2 USPQ2d 1647 (1987) and In Re Hack 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Therefore, the reference is deemed to anticipate the instant claim above.

Claims 1, 5, and 6 are rejected under 35 USC § 102 (b) as being anticipated by Ghosal (US 6,224,906).

Ghosal teaches a composition comprising St. John's Wort extract (the same as *Hypericum perforatum*, col 1, lines 10-15). Ghosal also teaches that *Hypericum perforatum* contains phloroglucinols and procyanidins (cols 2&3, Table 1).

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., Ex Parte Masham, 2 USPQ2d 1647 (1987) and In Re Hack 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Therefore, the reference is deemed to anticipate the instant claim above.

Claim Rejections –35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Imaoka et al (JP 406179609), Barney et al (US 5,370,863), Van den Berghe (US 6,284,289), and Zou (CN 1421240).

Imaoka et al teach a composition with high antibacterial activity on oral bacteria comprising grape extract.

As evidenced by Nieuwenhuizen et al (US 2003/0064937), grape contains procyanidins [p0023, 0077]. Further evidenced by Gros (FR 2571257), grapes contain anthocyanoside (see Abstract).

Barney et al teach a composition for inhibiting undesirable gram positive microorganisms in the oral cavity bacteria proliferation comprising hops acids (col 1, lines 5-10).

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As evidenced by Cooper et al (US 6,379,720), hops (the same as *Humulus lupulus*, col 1, lines 50-55) extract contains alpha acids, represented by humulone and its congeners (cohumulone, admululone) and beta acids, represented by lupulone and its congeners (colupulone, adlupulone) (col 1, lines 50-58).

Van den Berghe teaches a composition for treating cold sores (infection in oral cavity) comprising *Myrtus communis* and *Hypericum perforatum* (col 4, lines 14-22).

Zou teaches a composition for treating sore and selling throat, acute pharyngitis, and acute laryngitis (oral cavity infection) comprising mint oil (see Abstract).

It is well known that it is *prima facie* obvious to combine two or more ingredients each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. *In re Sussman*, 1943 C.D. 518; *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Susi*, 58 CCPA 1074, 1079-80; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-21; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960).

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to combine the inventions of McCleary, Flores, Gervais, and Palmer since all of them teach compositions for improving mental activity individually in the art.

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Since all the compositions yielded beneficial results in enhancing mental agility and mental acuity, one of ordinary skill in the art would have been motivated to make the modifications. The result-effective adjustment in conventional working parameters (e.g., determining an appropriate amount of the components within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., *Ex Parte Masham*, 2 USPQ2d 1647 (1987) and *In Re Hack* 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Van den Berghe (US 6,284,289), and Naguib (US 6,623,768).

Van den Berghe teaches a composition for treating cold sores (infection in oral cavity) comprising *Myrtus communis* and *Hypericum perforatum* (col 4, lines 14-22).

Van den Berghe does not teach extracting *Myrtus communis* with carbon dioxide, and a content of myrtocumolone in the extract.

Naguib teaches extracting hops and other herbs (col 4, lines 30-35) with supercritical carbon dioxide fluid at temperatures ranging from 31 to 80 degree C. and pressures between 150 and 400 bars (claim 7).

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use supercritical carbon dioxide fluid of Naguib to extract *Myrtus communis* since Naguib teaches that supercritical carbon dioxide fluid extraction technique has the advantage over extraction with conventional organic solvents that the extraction medium is readily and completely removed by allowing the liquid carbon dioxide to vaporize into the atmosphere, and thus problems of wasting solvent disposal and tracing solvent contamination of finished product are eliminated. Since all the compositions yielded beneficial results in using plant extracts, one of ordinary skill in the art would have been motivated to make the modifications. It is inherent that *Myrtus communis* has a content of 35% myrtocumolone in the extract when the supercritical carbon dioxide fluid extraction technique is used. The result-effective adjustment in conventional working parameters (e.g., determining an appropriate amount of the components within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Applicant is requested to note that it is regarded that "intended use" of a composition or product will not further limit claims drawn to a composition or product. See, e.g., *Ex Parte Masham*, 2 USPQ2d 1647 (1987) and *In Re Hack* 114, USPQ 161. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Conclusion

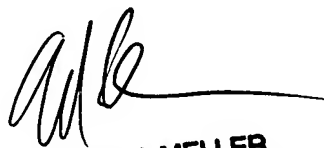
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry Mckelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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PRIMARY EXAMINER